

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023210**Date Inspected:** 01-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the Self-Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TA YARD, OBG 14E (NWIT # 09000)

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3019M-082, 083, 087, 088, 092, 093, 097, 098, 102, 103, 107, 108, 112, 113, 117, 118

This Quality Assurance (QA) Inspector observed the following work in progress:

TA YARD

OBG Seg 14W:

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020D-038 [Deck Panel (DP) diaphragm of DP 3172A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 128.3]. The

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

welder is identified as 066695 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020E-001 [DP diaphragm of DP 3173A to FB 3343A, CJP weld at PP 128.3]. The welder is identified as 067949 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB. Attached photograph provide additional details.

The FCAW process on weld joint no: SEG3020V-027 [DP diaphragm of DP 3168A to top anchorage plate (AP) 3013A, CJP weld at PP 125]. The welder is identified as 066881 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB. Attached photograph provide additional details.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AH-002 [Side Panel (SP) 3144B to Edge Panel (EP) 3029A, CJP weld at PP125 to PP127]. The welder is identified as 037932 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020\*-014 [EP 3029A to DP 3184A, CJP weld at PP128 to PP128.3]. The welder is identified as 037748 and was observed welding in 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020D-004 [Block out bottom plate sub assembly (SA) 3416A to FB 3342A, Fillet weld at PP 128.3]. The welder is identified as 067610 and was observed welding in 4F position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2114-FCM-1.

Repair welding of weld joint no: SEG3020X-004 ~ 007 [Longitudinal Diaphragm (LD) 3049A to Top AP 3016A, CJP weld in between PP 125 to PP126]. The welder is identified as 066361 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair-1. Repair welding was done as per Welding Repair Report (WRR): B-WR 20845 Rev-0.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Gaikwad,Umesh

Quality Assurance Inspector

---

**Reviewed By:** Peterson,Art

QA Reviewer